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P.O. BOX 828			LEE, JAE YOUNG	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/788,616	Applicant(s) FARR ET AL.
	Examiner JAE Y. LEE	Art Unit 2466

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 October 2009.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-35 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 23 October 2009 has been entered.

Response to Arguments

2. Claims 1, 2, 11, 12, and 21-24 have been amended.

Response to Arguments

3. Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

For claim 12, it is unclear whether 112, 6th paragraph, has been invoked for the claim elements "*publication manager, subscription manager, subscription router*"

because the phrase "means for" or "step for" is not used and no specific structure is recited to perform the functionality in the claim limitation.

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to:

- (a) Amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines: the phrase "means for" or "step for" must be modified by functional language and the phrase must not be modified by sufficient structure, material, or acts for performing the claimed function; or
- (b) Show that the claim limitation is written as a function to be performed and the claim does not recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP § 2181.

To achieve the goal of compact prosecution, the examiner assumes that 112, sixth paragraph has been invoked for the claim elements. Specification paragraph 0014 lines 8-9 recites "the agent may be implemented in hardware, firmware, software, or combinations" performs the functions and paragraph 0028 lines 1-3 recites "the agent includes a publication manager and a subscriber manager." However, there is no specific structure or algorithm corresponding to the function for each manager in the specification. Therefore, it is rejected under 35 U.S.C. 112, 2nd Paragraph because there is no disclosure or insufficient disclosure of the structure for performing the function recited in a claim limitation invoking 35 U.S.C. 112, sixth paragraph.

Claims 13-23 are rejected based upon the rejection of independent claim 12.

For claim 24, it is unclear whether 112, 6th paragraph, has been invoked for the claim element "*publisher, subscribe, the publisher and subscriber architecture*" because the phrase "means for" or "step for" is not used and no specific structure is recited to perform the functionality in the claim limitation. If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to:

- (a) Amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines: the phrase "means for" or "step for" must be modified by functional language and the phrase must not be modified by sufficient structure, material, or acts for performing the claimed function; or
- (b) Show that the claim limitation is written as a function to be performed and the claim does not recite sufficient structure, material, or acts for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph. For more information, see MPEP § 2181.

To achieve the goal of compact prosecution, the examiner assumes that 112, sixth paragraph has been invoked for the claim elements. Specification paragraph 0014 lines 8-9 recites "the agent may be implemented in hardware, firmware, software, or combinations" performs the functions, paragraph 0015 lines 9-13 recites "the agent either acts as a publisher or a subscriber of the first entity. If the agent acts as a publisher it publishes information transmitted from the first entity. If the agent acts as a subscriber it receives information for the first entity and transmits that information to the first entity", paragraph 0028 lines 1-3: the agent includes a publication manager and a subscriber manager ... the publishing manager ... publishing it to other entities ... the

subscription manager ... forwarding it to the entity that subscribed to the channel." However, there is no specific structure or algorithm corresponding to the function between the publisher and the subscriber. Therefore, it is rejected under 35 U.S.C. 112, 2nd Paragraph because there is no disclosure or insufficient disclosure of the structure for performing the function recited in a claim limitation invoking 35 U.S.C. 112, sixth paragraph.

Claims 25-35 are rejected based upon the rejection of independent claim 24.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 12, 13, 17, 22-25, 30, 32, 35** are rejected under 35 U.S.C. 102(e) as being anticipated by Schwesig (US 2005/0010635).

For claim 12, Schwesig discloses a system comprising:

- an interface to a specific entity (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface), the specific entity interface including a first protocol for communicating with the specific entity over the first network (Fig. 2: publishing

clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs); and

- a network interface to a publisher/subscriber architecture on the second network, the publisher/subscriber architecture including (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs);
- a publication manager that determines which one of a plurality of remote entities is to receive a first quantity of information that is received by the agent from the specific entity and published by the agent (Fig. 2: publishing clients, subscribing clients; Fig. 5: publish manager; paragraph 0053 lines 1-14: publish manager manages media files received as published files; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server); and
- a subscription manager that establishes at least one subscription for the specific entity to receive publications from at least a selected one of the plurality of

remote entities (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0052 lines 1-11: subscription manager verifies that a subscribing client is authorized to subscribe to a restricted channel before allowing the subscribing client to become a subscriber for that channel. The subscription manager extracts authorization information from a subscription received from the subscribing client to authorize the subscription; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0081 lines 1-2: the server generates a notification indicating the new media file is available; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client);

- a subscription router that receives the publications from the selected one of the remote entities (Fig. 5; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client);
- a subscription and publication table that the subscription router accesses to hold subscription information pertaining to which ones of a plurality of different entities

are to receive subscription information from the subscription router, and to identify that the subscription information is to be transmitted to the specific entity (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client); and

- the subscription and publication table also holding publication information as to which one or more of said pluralities of remote entities said publications from said specific remote entity are to be published to (paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0081 lines 8-20: the server maintains a notification page or table including the notification information. When the server has received an update, the server changes the notification page to reflect the update. The server sends a notification to each of the subscribing clients that are recorded subscribers for a network media channel when there is an update for the channel such as by email; paragraph 0082 lines

1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client)

For claim 13, Schwesig discloses

- a translator to translate between the first protocol and a second protocol associated with the second network, the first and the second protocols being different (Fig. 5; paragraph 0054 lines 1-10: trancoding manager; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel)

For claim 17, Schwesig discloses

- further comprising a registration manager to register the first specific entity as at least one of a publisher and a subscriber (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel)

For claim 22, Schwegsиг discloses

- wherein the network interface includes an Internet interface (Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

For claim 23, Schwegsиг discloses

- wherein the agent is implemented in at least one of hardware, firmware, and software (Fig. 5; paragraph 0048 lines 3-6: the server includes one or more microprocessors and some or all of the control and manager functionality is provided by software executed by the microprocessor)

For claim 24, Schwegsиг discloses a system comprising:

- a first network having a first protocol (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs);
- a specific entity configured to use the first protocol to communicate over the first network (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs); and
- an agent associated with the first network interposed between the first network and a second network including a publisher/subscriber publisher and subscriber

architecture, the agent adapted to act as (Fig. 2: publishing clients, subscribing clients; Fig. 5: publish manager; paragraph 0053 lines 1-14: publish manager manages media files received as published files; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server):

- a publisher for the entity for a first information to be transmitted by the entity over the first network in accordance with the first protocol (Fig. 2: publishing clients, subscribing clients; Fig. 5: publish manager; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0053 lines 1-14: publish manager manages media files received as published files; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file

is published, subscribing client that are subscribers can request the media file from the server), and

- a subscriber for the entity for a second information to be transmitted to the agent over the second network from one or more remotely located entities (Fig. 2: publishing clients, subscribing clients; Fig. 5: publish manager; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0053 lines 1-14: publish manager manages media files received as published files; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client);
- the publisher and subscriber architecture adapted to access a subscription and publication table to determine which one or more of said plurality of remotely located entities said first information published by said specific entity is to be published to (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from

the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client); and

- the publisher and subscriber architecture adapted to access the subscription and publication table to determine, from data stored therein, that the specific entity is to receive the second information from a given one of said one or more remotely located entities (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a

publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client)

For claim 25, Schwesig discloses

- further comprising: a third network in communication with the second network and providing the second information (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that

the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client)

For claim 30, Schwesig discloses

- the agent further comprising a translator to translate between the first protocol and a second protocol associated with the second network (Fig. 5; paragraph 0054 lines 1-10: transcoding manager; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel)

For claim 32, Schwesig discloses

- the first network is associated with a mobile platform (Fig. 5; paragraph 0054 lines 1-10: transcoding manager; paragraph 0024 lines 1-11: the network is a combination of IP network, cellular GSM, Wi-Fi network, LANs, WANs; paragraph

0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel)

For claim 35, Schwesig discloses

- the first protocol is custom to the first network (Fig. 5; paragraph 0054 lines 1-10: trancoding manager; paragraph 0024 lines 1-11: the network is a combination of IP network, cellular GSM, Wi-Fi network, LANs, WANs)

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 1, 5, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwesig (US 2005/0010635) in view of Evans et al. (US 2003/0033283).

For claim 1, Schwesig discloses a method comprising:

- providing a publisher/subscriber architecture (Fig. 2: publishing clients, subscribing clients) having a subscription manager for acting as a proxy subscriber on a first network to receive first information over the first network relating to the subscription, for use by a specific entity communicating with the publisher/subscriber architecture over a second network (Fig. 5; paragraph 0052 lines 1-11: subscription manager verifies that a subscribing client is authorized to subscribe to a restricted channel before allowing the subscribing client to become a subscriber for that channel. The subscription manager extracts authorization information from a subscription received from the subscribing client to authorize the subscription; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server; paragraph 0081 lines 1-2: the server generates a

- notification indicating the new media file is available; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client);
- using a subscription router to receive the first information (Fig. 5; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client)
 - using the subscription router to access a table to determine which one of a plurality of different entities in communication with the publisher/subscriber architecture, and that have each previously provided a subscription request to the publisher/subscriber architecture, are to receive the first information (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client);
 - using the table to determine specifically which one or more of the entities are to receive the first information, and transmitting the first information to the one or more of the entities in accordance with subscription information from the table (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0077 lines 1-8:

- the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0082 lines 1-3: the server receives a request from a subscribing client that is a subscriber to the network media channel and sends the media file to a subscribing client),
- using a publication manager of the publisher/subscriber architecture to accept a second information from the one or more of the entities, and to act as a publisher of the second information for the one or more of the entities to at least one remote entity (Fig. 2: publishing clients, subscribing clients; Fig. 5: publish manager; paragraph 0053 lines 1-14: publish manager manages media files received as published files; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server); and
 - for at least one of the publisher and subscriber operations, using the publisher/subscriber architecture to automatically register the one or more of the entities to implement one of the publishing and subscription operations without a

registration action by the one or more of the entities (Fig. 2: publishing clients, subscribing clients; paragraph 0082 lines 4-7: the server automatically sends new media files to a subscribing client such as along with the notification or after receiving that the notification received)

Schwegsиг discloses all the subject matter of the claimed invention with the exception for providing a publisher/subscriber architecture having a subscription manager for generating a subscription. Evans discloses providing a publisher/subscriber architecture having a subscription manager for generating a subscription (Fig. 2; paragraph 0018 lines 3-7: publish & subscribe data distribution; paragraph 0020 lines 1-7: subscription message generator generating subscription message in a format acceptable to the data distribution system). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate providing a publisher/subscriber architecture having a subscription manager for generating a subscription of Evans to the method of Schwegsиг. The motivation would have been to automatically update a cached file as soon as an update becomes available at a source file by using a publish and subscribe system (Evans paragraph 0010 lines 1-6).

For claim 5, Schwegsиг discloses

- translating the first information from a protocol associated with the first information and a second protocol associated with the second information and the first and the second protocols being different (Fig. 2: publishing clients,

subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0082 lines 7-21: the server determines the type of platform of the subscribing client and the format that the subscribing client is requesting. If the stored media file does not match the platform and format for the subscribing client, the server transcodes the media file to the match the client)

For claim 14, Schwesig discloses

- the translator (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0082 lines 7-21: the server determines the type of platform of the subscribing client and the format that the subscribing client is requesting. If the stored media file does not match the platform and format for the subscribing client, the server transcodes the media file to the match the client)

Schwesig discloses all the subject matter of the claimed invention with the exception for generating a subscription on XML. Evans discloses generating a subscription on XML (Fig. 2 10 integrated application delivery system; paragraph 0024 lines 13-16: unified XML controller controlling delivery of content via the convergence switch performing the gateway-like function of translating data packets or streams between the enterprise IP network and the user networks; Fig. 5, paragraph 0029 lines 17-29). Therefore, it would have been obvious to the person of ordinary skill in the art at

the time of invention was made to incorporate generating a subscription on XML of Evans to the method of Schwesig. The motivation would have been to automatically update a cached file as soon as an update becomes available at a source file by using a publish and subscribe system (Evans paragraph 0010 lines 1-6).

10. Claims 2, 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of Evans et al. (US 2003/0033283) as applied to claim 1 above, and further in view of Giroti et al. (US 2003/0018700).

For claim 2, Schwesig discloses

- one or more of the entities (Fig. 2: publishing clients, subscribing clients)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for time division multiplexing information. Giroti discloses time division multiplexing information (Fig. 2 20 PSTN, 26 phone; PSTN is TDM based network). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate time division multiplexing information of Giroti to the method of Schwesig and Evans. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

For claim 6, Schwesig discloses

- the second protocol is an Internet Protocol (Fig. 2; paragraph 0024 lines 1-11:
the network is a combination of IP network, wireless network, Wi-Fi network,
LANs, WANs)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for the first protocol is a TDM protocol. Giroti discloses the first protocol is a TDM protocol (Fig. 2 20 PSTN, 26 phone; PSTN is TDM based network). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the first protocol is a TDM protocol of Giroti to the method of Schwesig and Evans. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

For claim 7, Schwesig discloses

- the first protocol and the second protocol (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for using XML to translate between the first protocol and the second

protocol. Giroti discloses using XML to translate between the first protocol and the second protocol (Fig. 2 10 integrated application delivery system; paragraph 0024 lines 13-16: unified XML controller controlling delivery of content via the convergence switch performing the gateway-like function of translating data packets or streams between the enterprise IP network and the user networks; Fig. 5, paragraph 0029 lines 17-29). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate using XML to translate between the first protocol and the second protocol of Giroti to the method of Schwesig and Evans. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

11. **Claims 3, 4** are rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of Evans et al. (US 2003/0033283) as applied to claim 1 above, and further in view of Chou et al. (US 2003/0018796).

For claim 3, Schwesig discloses

- publisher and subscriber architecture (Fig. 2)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for fusing the first information and a third information and transmitting the

fused information. Chou discloses using the first information and a third information and transmitting the fused information (Fig. 3B, Fig. 5; paragraph 0013 lines 11-19: multiplexing different versions of the multimedia information encoded at a different transmission rate to form a sequence of frames having an average transmission rate approximating the available transmission rate; paragraph 0042 lines 12-18). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate fusing the first information and a third information and transmitting the fused information of Chou to the method of Schwesig and Evans. The motivation would have been to increase bandwidth efficiency by using multiplexing technique.

For claim 4, Schwesig discloses

- publisher and subscriber architecture (Fig. 1)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for the first information and the third information transmitted at different rates. Chou discloses the first information and the third information transmitted at different rates (Fig. 3B, Fig. 5; paragraph 0013 lines 11-19: multiplexing different versions of the multimedia information encoded at a different transmission rate to form a sequence of frames having an average transmission rate approximating the available transmission rate; paragraph 0042 lines 12-18). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the first information and the third information transmitted at different rates of Chou to the

method of Schwesig and Evans. The motivation would have been to increase bandwidth efficiency by using multiplexing technique.

12. **Claims 8-10** are rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of Evans et al. (US 2003/0033283) as applied to claim 1 above, and further in view of Nedbal (US 7,107,574).

For claim 8, Schwesig discloses

- the protocol associated with the second information and an expected protocol for the second information (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for validating by comparison. Nedbal discloses validating by comparison (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result in including error message and valid configuration response). Therefore, it would

have been obvious to the person of ordinary skill in the art at the time of invention was made to validating by comparison of Nedbal to the method of Schwesig and Evans. The motivation would have been to enhance reliability by using XSD validation technique.

For claim 9, Schwesig discloses

- the protocol associated with the second information and an expected protocol for the second information (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for validating using an XSD schema. Nedbal discloses validating using an XSD schema (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result in including error message and valid configuration response). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate validating using an XSD schema of

Nedbal to the method of Schwesig and Evans. The motivation would have been to enhance reliability by using XSD validation technique.

For claim 10, Schwesig discloses

- the protocol associated with the second information and an expected protocol for the second information (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-2: the server receives a media file to be published from a publishing client)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for ignoring subsequent messages from the same source if the validation failed. Nedbal discloses ignoring subsequent messages from the same source if the validation failed (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result including error message in case of failure; subsequent pieces are implicitly ignored due to generating error message). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate ignoring subsequent messages from the same source if the validation

failed of Nedbal to the method of Schwesig and Evans. The motivation would have been to enhance reliability by using XSD validation technique.

13. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of Evans et al. (US 2003/0033283) as applied to claim 1 above, and further in view of Mueller et al. (US 2005/0027867).

For claim 11, Schwesig discloses

- accepting a request for a changed subscription from the entity and changing the subscription, and updating the table to reflect the changed subscription (paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel)

Schwesig and Evans disclose all the subject matter of the claimed invention with the exception for dynamic subscription registration. Mueller discloses dynamic subscription registration (paragraph 0034 lines 1-10: subscription including identity, and device registration done dynamically at a future time). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate dynamic subscription registration of Mueller to the method of Schwesig and

Evans. The motivation would have been to increase flexibility by actively changing information by user (paragraph 0034 lines 6-10).

14. **Claims 14, 21, 27-29, 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwesig (US 2005/0010635) in view of Giroti et al. (US 2003/0018700).

For claims 14, 31, Schwesig discloses

- the translator (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; paragraph 0082 lines 7-21: the server determines the type of platform of the subscribing client and the format that the subscribing client is requesting. If the stored media file does not match the platform and format for the subscribing client, the server transcodes the media file to the match the client)

Schwesig discloses all the subject matter of the claimed invention with the exception for the translator being based on XML. Giroti discloses providing a publisher/subscriber architecture having a subscription manager for generating a subscription (Fig. 2 10 integrated application delivery system; paragraph 0024 lines 13-16: unified XML controller controlling delivery of content via the convergence switch performing the gateway-like function of translating data packets or streams between the enterprise IP network and the user networks; Fig. 5, paragraph 0029 lines 17-29).

Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the translator being based on XML of Giroti to the method of Schwesig. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

For claim 21, Schwesig discloses

- the specific entity interface (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface)

Schwesig discloses all the subject matter of the claimed invention with the exception for the entity interface is a TDM interface. Giroti discloses the entity interface is a TDM interface (Fig. 2 20 PSTN; PSTN is implicitly a TDM based network; Integrated application delivery system implicitly has an interface connected to the corresponding network). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate the entity interface is a TDM interface of Giroti to the method of Schwesig. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer

manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

For claim 27, Schwesig discloses

- the first protocol (Fig. 2: publishing clients, subscribing clients; Fig. 5; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

Schwesig discloses all the subject matter of the claimed invention with the exception for TDM protocol. Giroti discloses TDM protocol (Fig. 2 20 PSTN; PSTN is implicitly a TDM based network; Integrated application delivery system implicitly has an interface connected to the corresponding network). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate TDM protocol of Giroti to the method of Schwesig. The motivation would have been to provide a Unified XML based integrated voice and data media converging switch and application delivery system, together forming an integrated application delivery system, are disclosed that enable users to interact with computer applications in a generally richer manner, enhancing service effectiveness and user satisfaction (Giroti paragraph 0006 lines 1-7).

For claim 28, Schwesig discloses

- The first protocol (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5)

Schwersig and Giroti disclose all the subject matter of the claimed invention with the exception for TADIL-J. Examiner takes Official Notice that TADIL-J is well known protocol in the art. Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to use TADIL-J instead of TDM in order to provide flexibility over communication network.

For claim 29, Schwesig discloses

- The first protocol (Fig. 2; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5)

Schwersig and Giroti disclose all the subject matter of the claimed invention with the exception for VMF. Examiner takes Official Notice that VMF is well known protocol in the art. Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to use VMF instead of TDM in order to provide flexibility over communication network.

15. **Claims 15, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwesig (US 2005/0010635) in view of Chou et al. (US 2003/0018796)).

For claim 15, Schwesig discloses

- The sources being associated with at least one of the first network and the second network (Fig. 2: publishing clients, subscribing clients; Fig. 5: network

interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

Schwesig discloses all the subject matter of the claimed invention with the exception for an information fuser wherein the fuser to fuse information for at least two sources. Chou discloses Fig. 2 12 enterprise IP network, 14 application, 16 DB (Fig. 3B, Fig. 5; paragraph 0013 lines 11-19: multiplexing different versions of the multimedia information encoded at a different transmission rate to form a sequence of frames having an average transmission rate approximating the available transmission rate; paragraph 0042 lines 12-18). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate Fig. 2 12 enterprise IP network, 14 application, 16 DB of Chou to the system of Schwesig. The motivation would have been to increase bandwidth efficiency by using multiplexing technique.

For claim 16, Schwesig discloses

- The first and second sources (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

Schwesig discloses all the subject matter of the claimed invention with the exception for the information fuser being configured to accept information form the first and the second sources at different rates. Chou discloses the information fuser being configured to accept information form the first and the second sources at different rates

(Fig. 3B, Fig. 5; paragraph 0013 lines 11-19: multiplexing different versions of the multimedia information encoded at a different transmission rate to form a sequence of frames having an average transmission rate approximating the available transmission rate; paragraph 0042 lines 12-18). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to the information fuser being configured to accept information from the first and the second sources at different rates of Chou to the system of Schwesig. The motivation would have been to increase bandwidth efficiency by using multiplexing technique.

16. Claims 18-20, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of Nedbal (US 7,107,574).

For claim 18, Schwesig discloses

- information received from the second network (Fig. 2: publishing clients, subscribing clients; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the

received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server)

Schwesig discloses all the subject matter of the claimed invention with the exception for a validation manager to validate information. Nedbal a validation manager to validate information (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result in including error message and valid configuration response). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate a validation manager to validate information of Nedbal to the system of Schwesig. The motivation would have been to enhance reliability by using XSD validation technique.

For claim 19, Schwesig discloses

- the protocol associated with the information from the second network with an expected protocol for the information from the second network (Fig. 2: publishing clients, subscribing clients; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first

verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server) Schwesig disclose all the subject matter of the claimed invention with the exception for validation manager to validate the information by comparison. Nedbal discloses validation manager to validate the information by comparison (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result in including error message and valid configuration response). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to validation manager to validate the information by comparison of Nedbal to the system of Schwesig. The motivation would have been to enhance reliability by using XSD validation technique.

For claims 20, 34, Schwesig discloses

- information received from the second network (Fig. 2: publishing clients, subscribing clients; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs; Fig. 5; paragraph 0077 lines 1-8: the server receives a request to be added as a subscriber from the subscribing client. If the channel is restricted, the server first verifies that the subscribing client is authorized to become a subscriber. The server adds the subscribing client to a list of subscribers for the network media channel; paragraph 0078 lines 1-7: the server receives a media file to be published from a publishing client. The server determines to which network media channel the received media file is to be published. If the network media channel is restricted, the server verifies that the publishing client is authorized to publish to the channel and verifies the media file is within any other restrictions of the channel; paragraph 0080 lines 1-3: once the media file is published, subscribing client that are subscribers can request the media file from the server)

Schweisig disclose all the subject matter of the claimed invention with the exception for an XSD schema used by validation manager to validate information.

Nedbal discloses an XSD schema used by validation manager to validate information (col 6 lines 30-31: validating XML data against XML schema data; col 11 lines 47-55: XML parser validating XMAL data against the XSD data in order to generate a validation result in including error message and valid configuration response). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate an XSD schema used by validation manager to validate information

of Nedbal to the system of Schwesig. The motivation would have been to enhance reliability by using XSD validation technique.

17. **Claim 33** is rejected under 35 U.S.C. 103(a) as being unpatentable by Schwesig (US 2005/0010635) in view of McCall et al. (US 2002/0188522).

For claim 33, Schwesig discloses

- the mobile platform (Fig. 2: publishing clients, subscribing clients; Fig. 5: network interface; paragraph 0024 lines 1-11: the network is a combination of IP network, wireless network, Wi-Fi network, LANs, WANs)

Schwesig discloses all the subject matter of the claimed invention with the exception for air craft as mobile platform. McCall discloses air craft as mobile platform (paragraph 0074 lines 6-9). Therefore, it would have been obvious to the person of ordinary skill in the art at the time of invention was made to incorporate air craft as mobile platform of McCall to the system of Schwesig. The motivation would have been to provide maximize mobility.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jae Y. Lee whose telephone number is (571) 270-3936. The examiner can normally be reached on Monday through Friday from 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on (571) 272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Jae Y Lee/
Examiner, Art Unit 2466

/Daniel J. Ryman/
Supervisory Patent Examiner, Art
Unit 2466